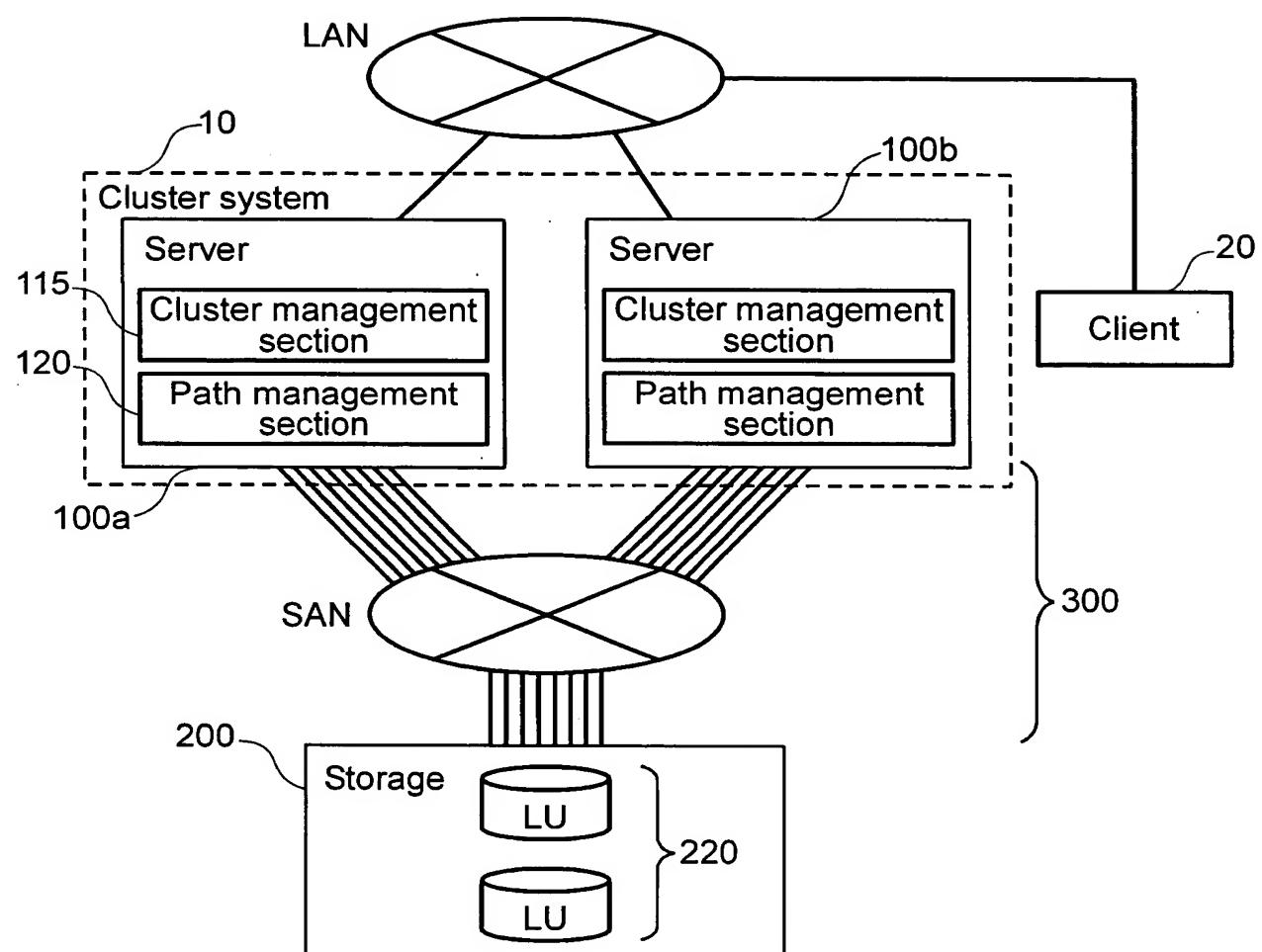
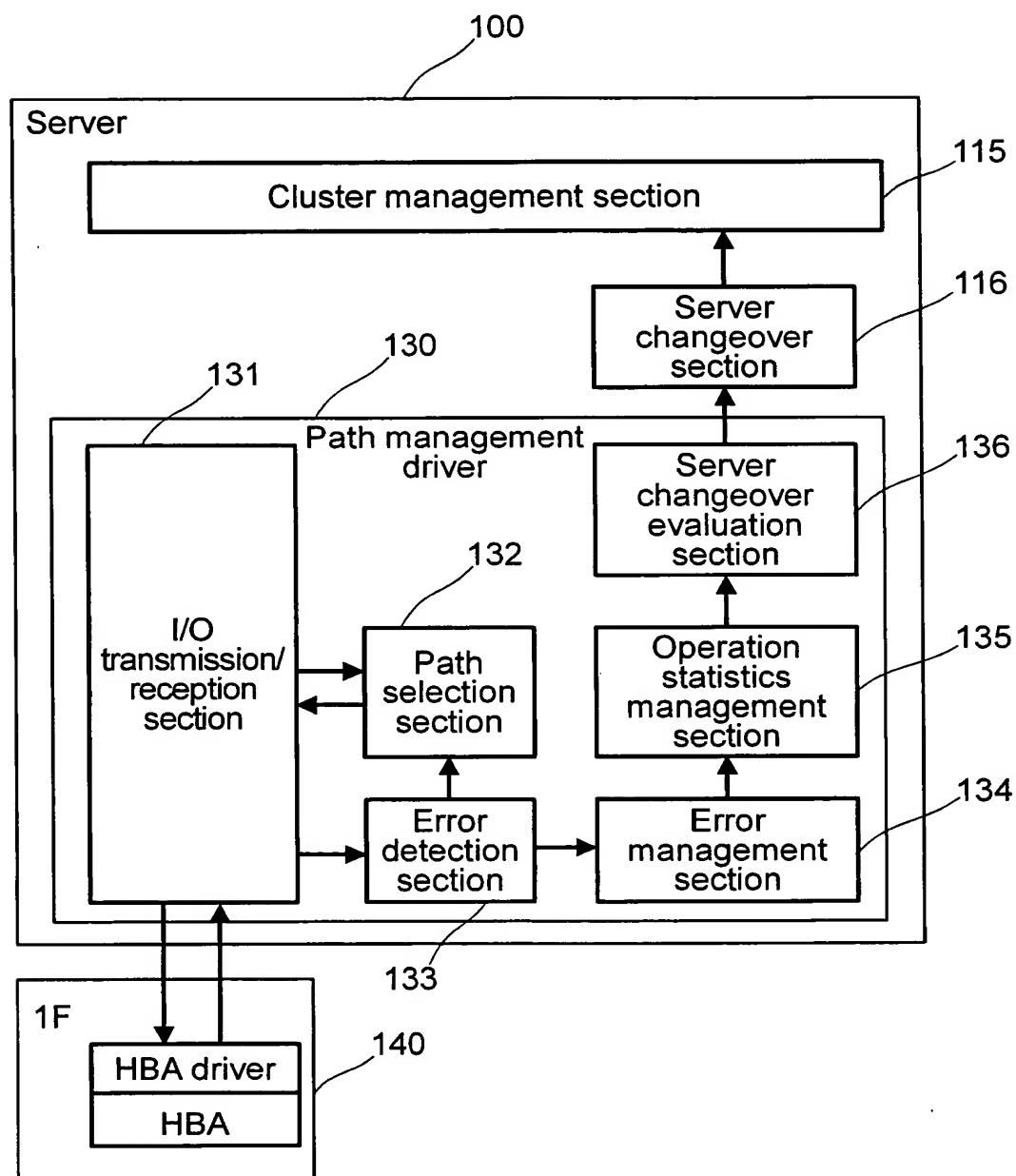


# FIG.1



## FIG.2



**FIG.3**

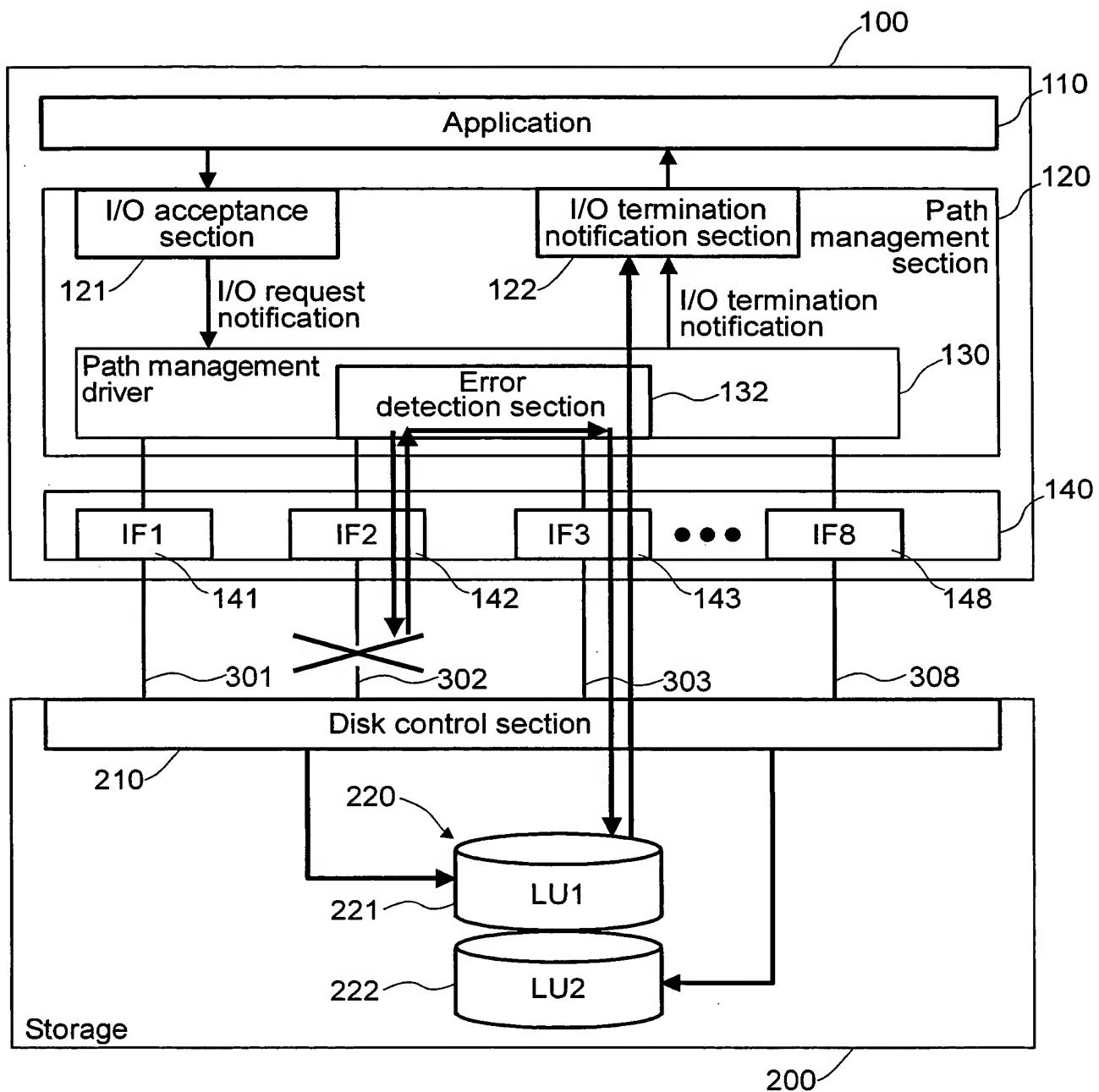
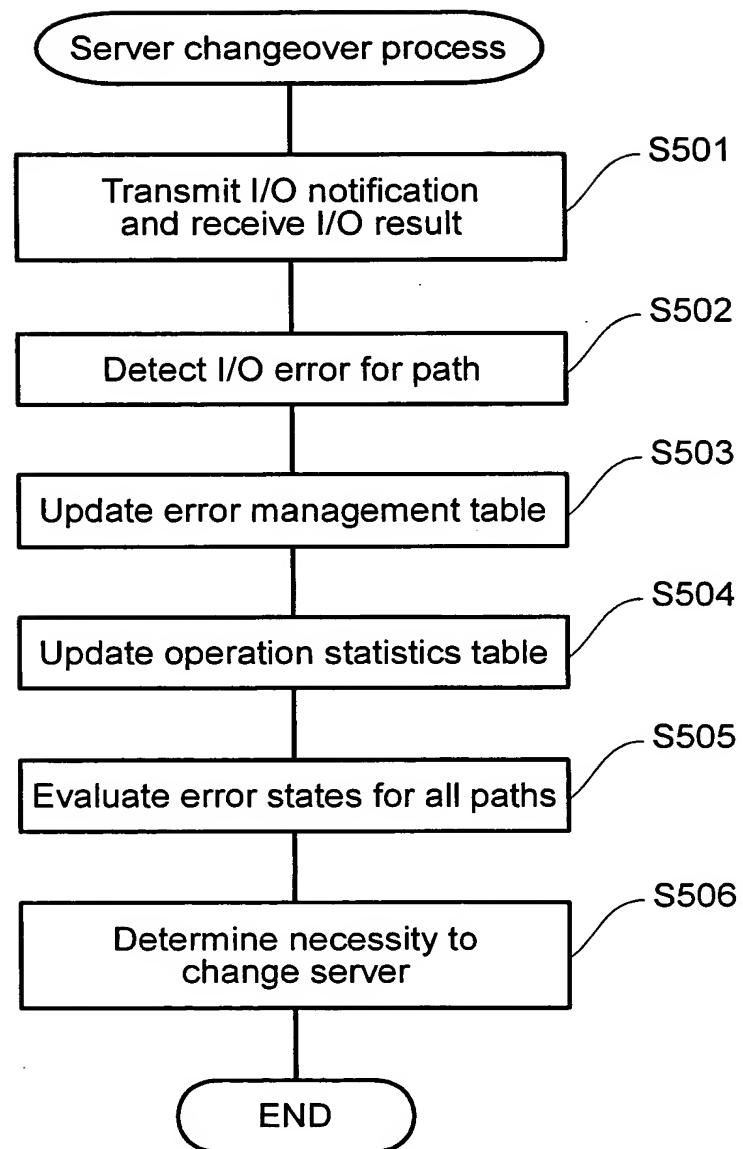
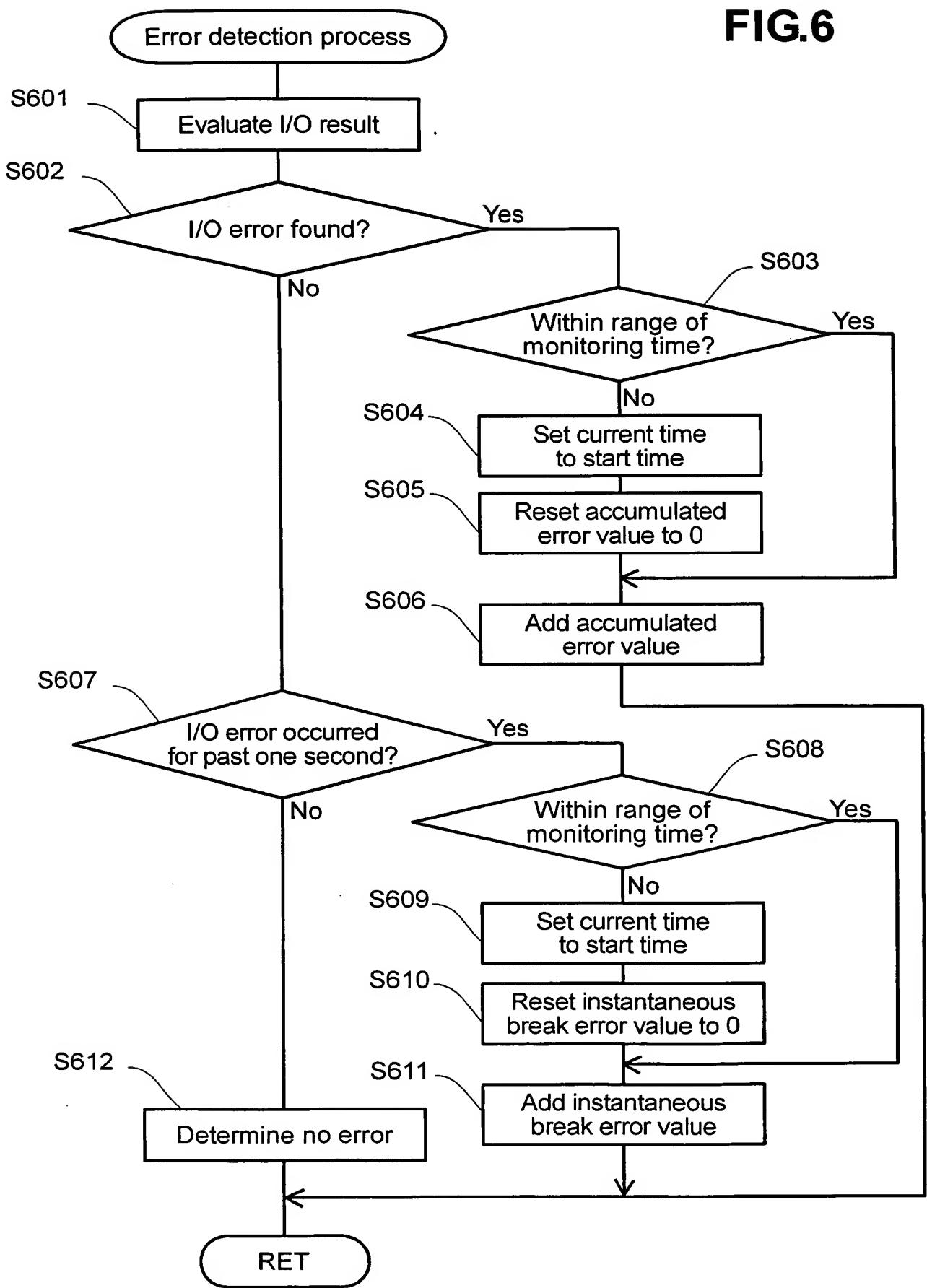


FIG. 4

## FIG.5



**FIG.6**

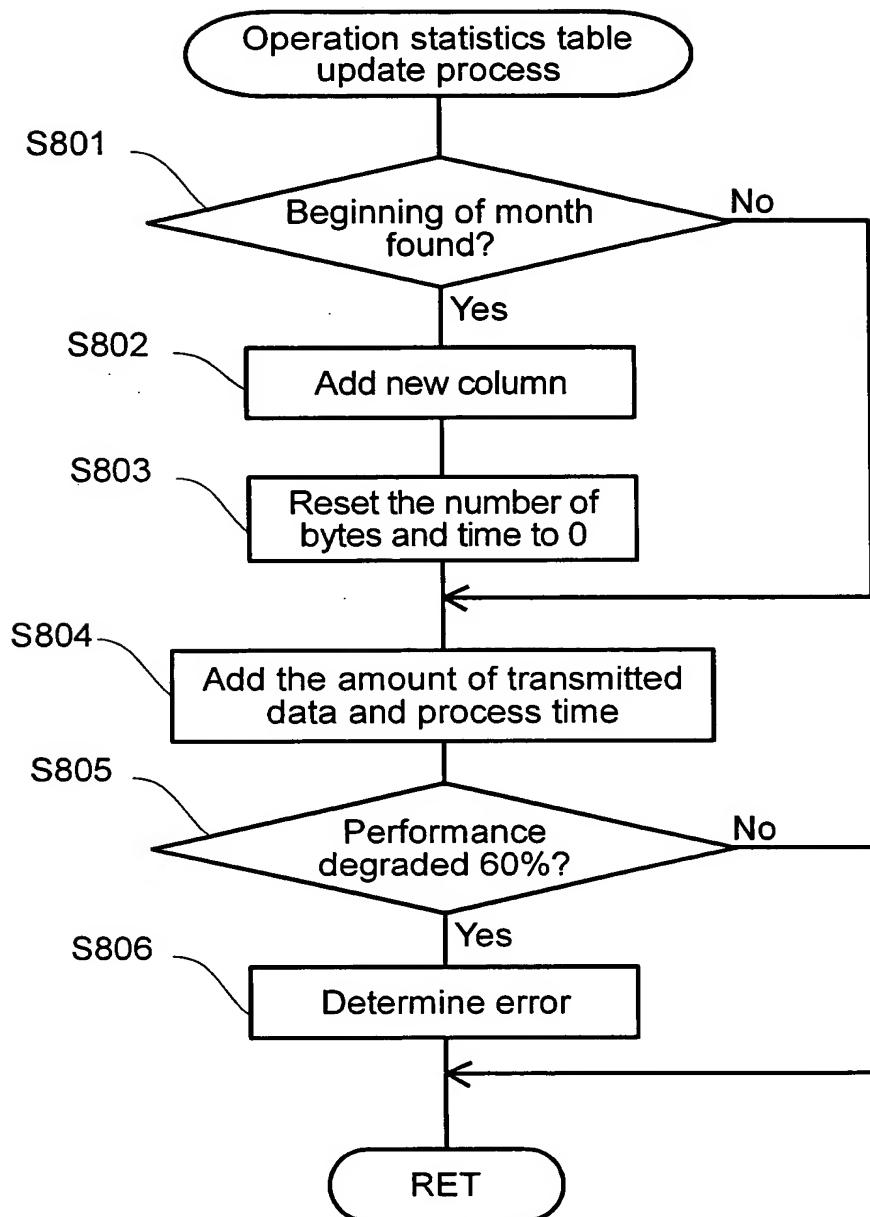


## FIG.7

Path error management table

Path	Error type	Start time	Monitoring period	Criterion	Detected value
1	Instantaneous break error	2003/9/1 10:20:30.020	30	20	19
	Accumulation error	2003/9/1 10:20:30.020	30	50	30
	Performance error	2003/9/1 10:20:30.020	-	1	0
2	Instantaneous break error	2003/9/1 10:20:30.020	30	20	0
	Accumulation error	2003/9/1 10:20:30.020	30	50	0
	Performance error	2003/9/1 10:20:30.020	-	1	0
3	● ● ●				

## FIG.8

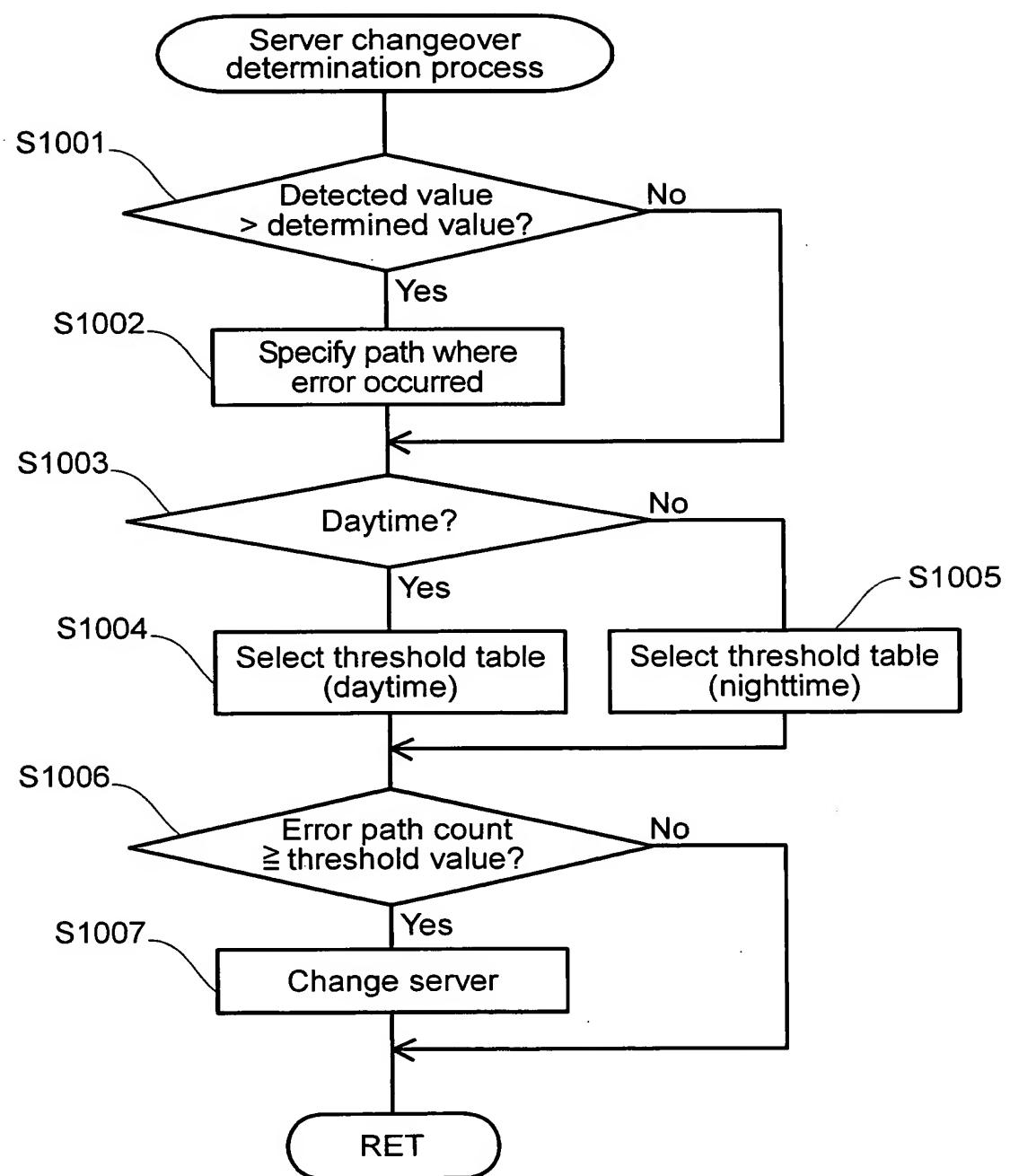


# FIG.9

Operation statistics management table

Path	2003/8/1		2003/9/1		2003/10/1		2003/11/1	
	Bytes	Time	Bytes	Time	Bytes	Time	Bytes	Time
1	100	1000	90	1000	80	1000	50	1000
2	100	1000	90	1000	80	1000	50	1000
3	100	1000	90	1000	80	1000	50	1000
4	100	1000	90	1000	80	1000	50	1000
5	100	1000	90	1000	80	1000	50	1000
6	100	1000	90	1000	80	1000	50	1000
7	100	1000	90	1000	90	1000	90	1000
8	100	1000	90	1000	90	1000	90	1000

# FIG.10



# FIG.11

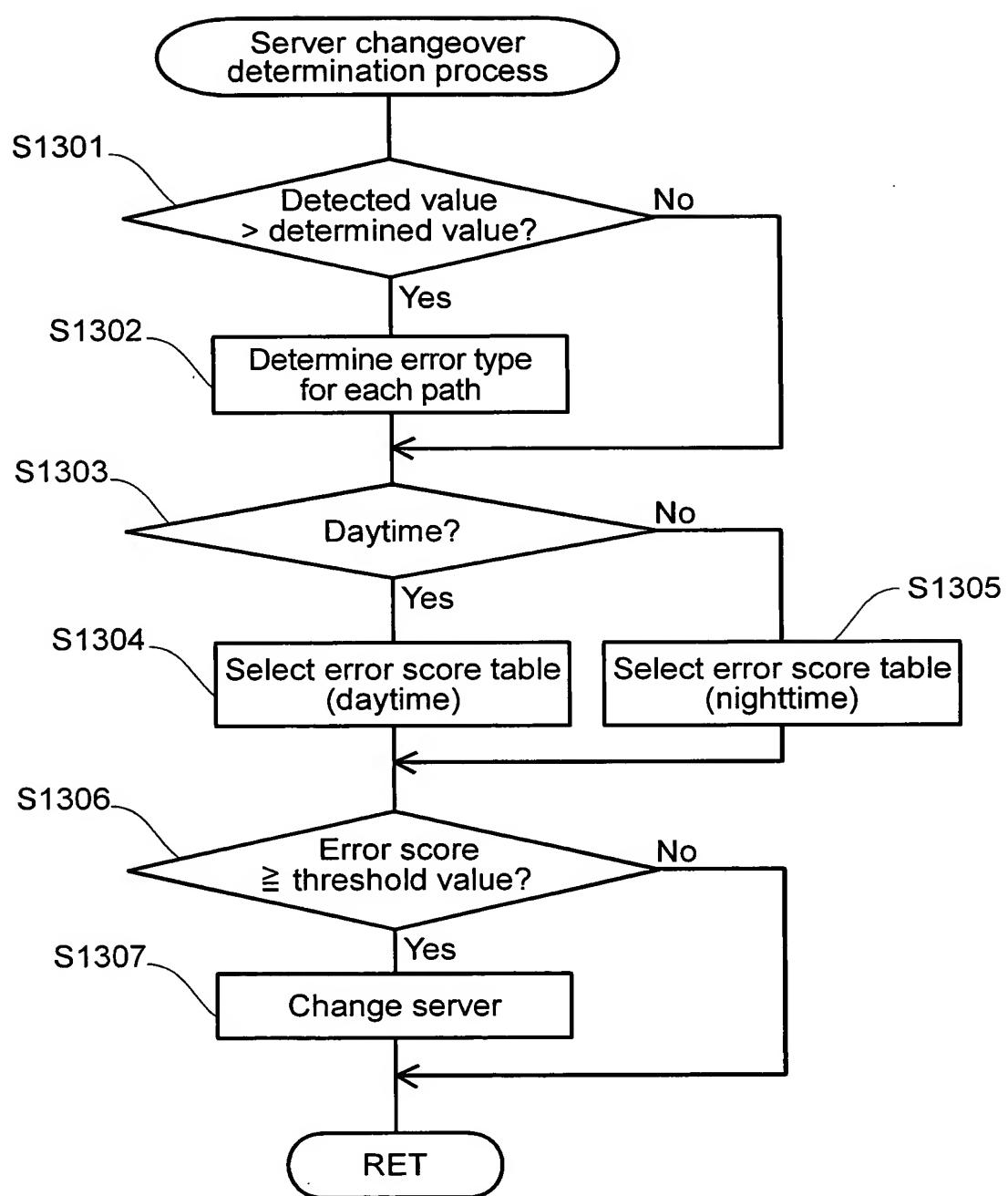
Sever changeover threshold value table

Error type	Ratio to total paths	
	Daytime	Nighttime
Instantaneous break error	50%	40%
Accumulation error	80%	70%
Performance error	90%	80%

**FIG.12**

Case	Path1	Path2	Path3	Path4	Path5	Path6	Path7	Path8
4	Instantaneous break	Instantaneous break	Instantaneous break	Accumulation	Accumulation	Normal	Normal	Normal
5	Accumulation	Accumulation	Accumulation	Performance	Performance	Performance	Performance	Normal
6	Instantaneous break	Instantaneous break	Accumulation	Accumulation	Performance	Performance	Normal	Normal

# FIG.13



# FIG.14

Error score table

Error type	Score	
	Daytime (1)	Nighttime (1.1)
Instantaneous break error	2	2.2
Accumulation error	1.43	1.57
Performance error	1.25	1.38

# FIG.15

